
2SD1676

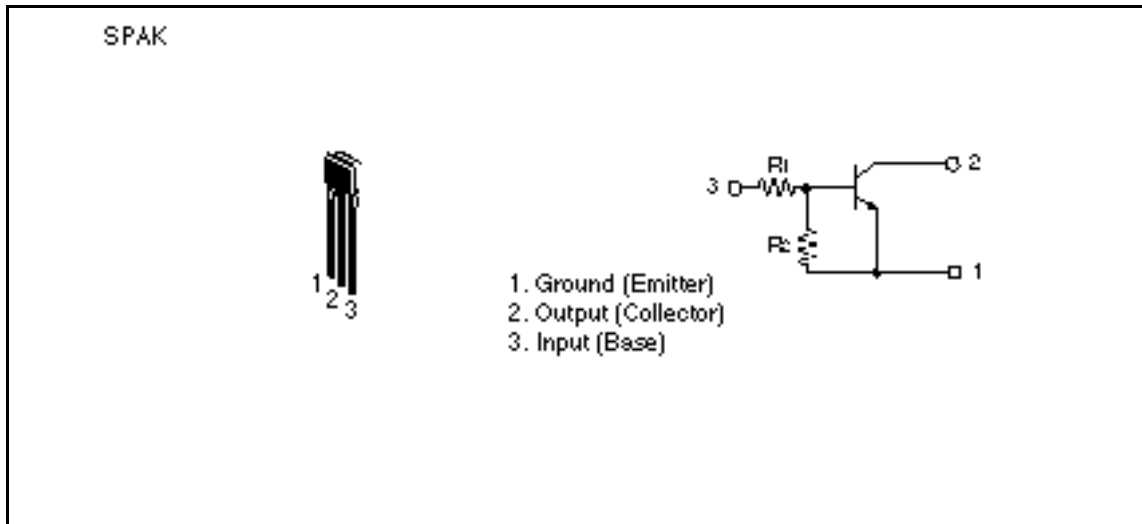
Silicon NPN with Internal Resistance

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Application

Low frequency amplifier, Muting, Switching, Inverter

Outline



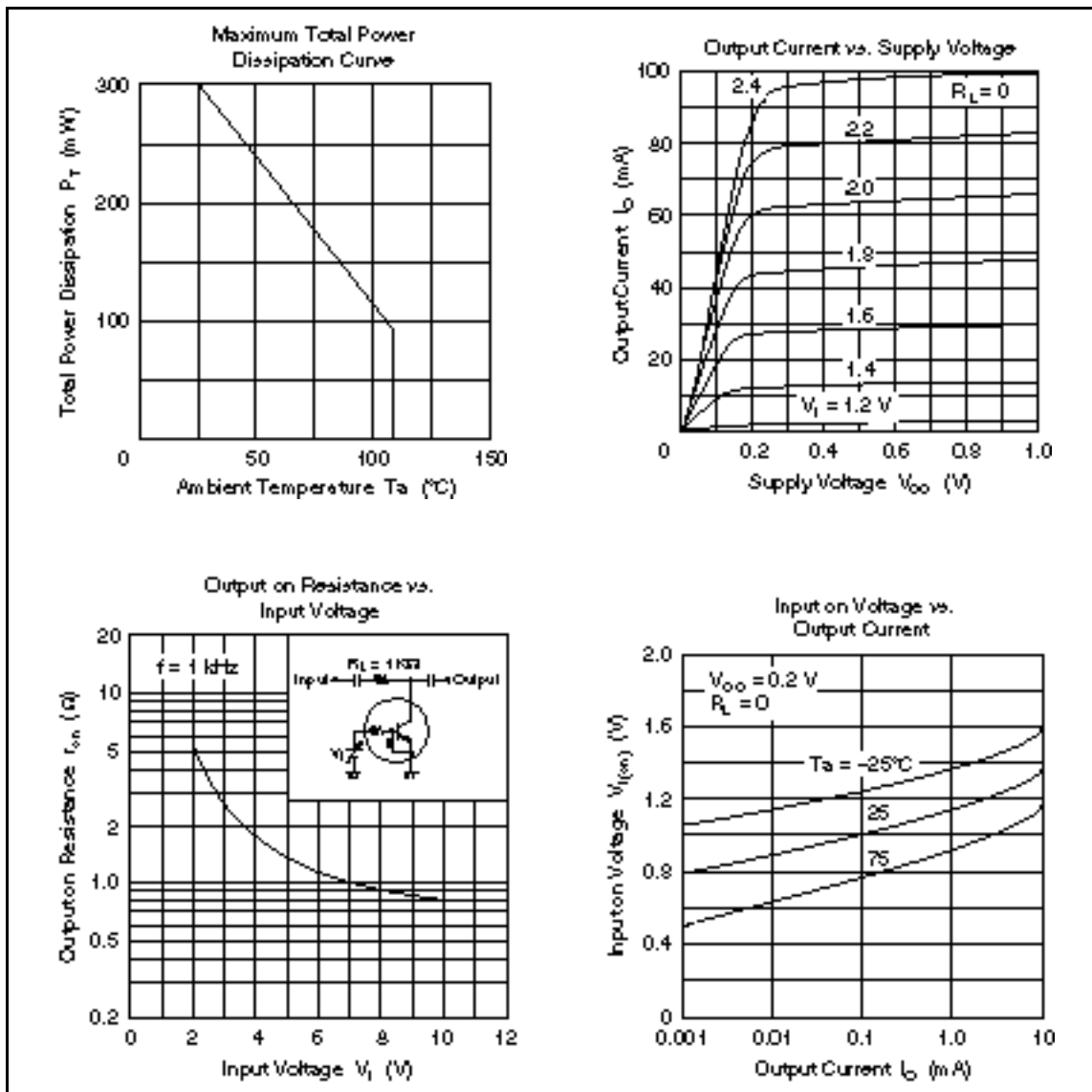
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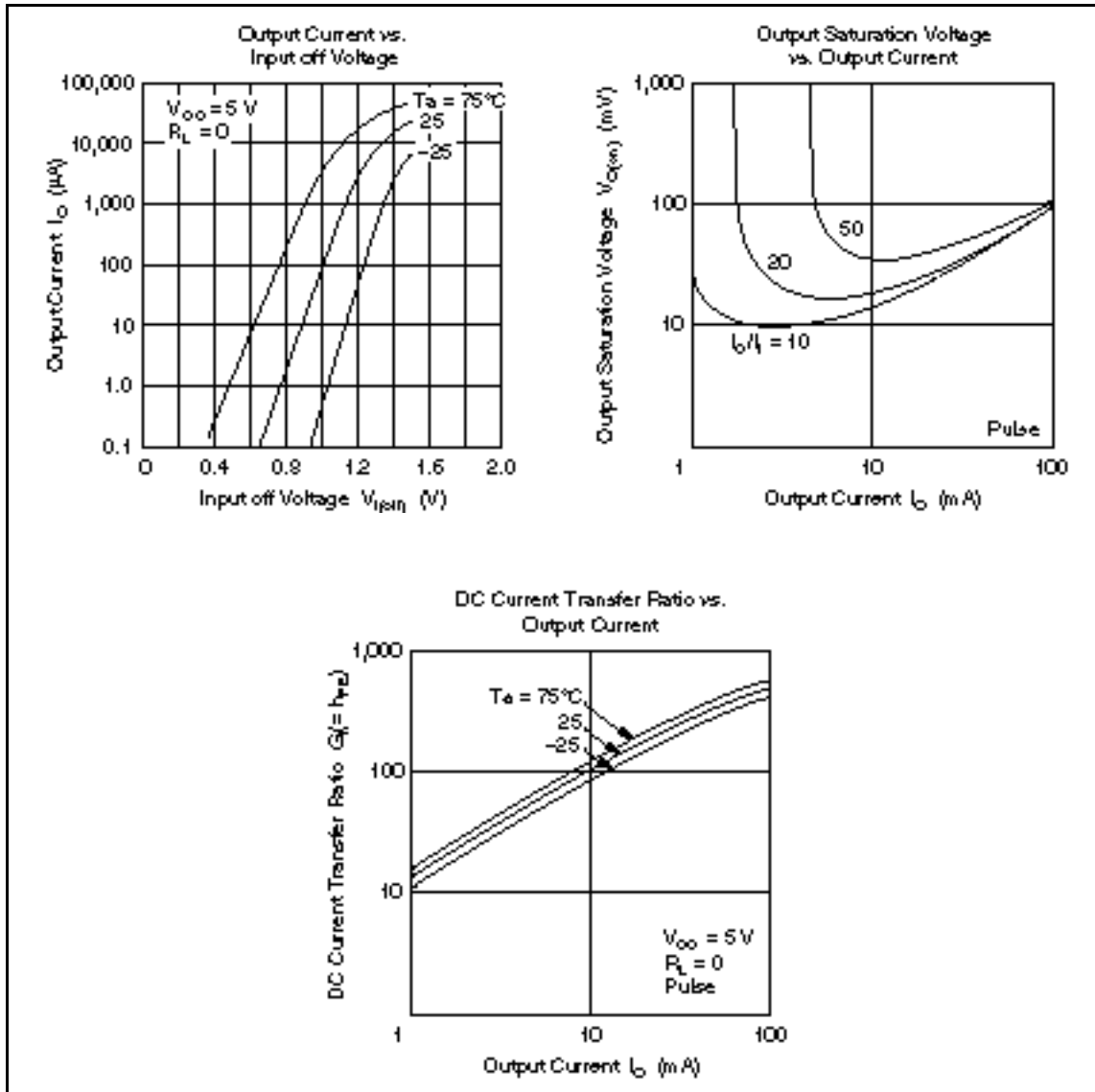
Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Supply voltage	V _{CC}	20	V
Input voltage	V _I	±10	V
Output current	I _O	600	mA
Total power dissipation	P _T	300	mW
Operating temperature	T _{OP}	-25 to +110	°C
Storage temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Input on voltage	V _{I(on)}	1.1	—	1.7	V	V _{CC} = 0.2 V, I _O = 10 mA
Input off voltage	V _{I(off)}	0.5	—	1.2	V	V _{CC} = 5 V, I _O = 10 μA
Output saturation voltage	V _{O(on)}	—	20	40	mV	I _O = 10 mA, I _I = 0.5 mA
Output cutoff current	I _{O(off)}	—	—	0.5	μA	V _{CC} = 5 V, V _I = 0
DC current transfer ratio	Gi	60	100	—		V _{CC} = 5 V, I _O = 10 mA
Input resistance	R _I	—	6.8	—	k	
Resistance ratio	R ₁ /R ₂	0.9	1.0	1.1		
Turn on time	t _{on}	—	0.3	—	μS	V _{CC} = 5 V, V _I = 5 V, R _L = 1k
Storage time	t _{stg}	—	1.5	—	μS	
Fall time	t _f	—	0.7	—	μS	
Output on resistance	r _{on}	—	1.0	—		V _I = 7 V, R _L = 1k, f = 1kHz





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